

## AMENDMENTS TO THE SPECIFICATION

*Kindly replace paragraph the "Abstract of the Invention" with the following marked-up version:*

### ABSTRACT OF THE INVENTION DISCLOSURE

An x-ray tube cooling system ~~for removing heat from the bearing assembly and bearing housing of a rotating anode type x ray device.~~ The x ray tube cooling system includes including a heat sink at least partially disposed within an evacuated housing of the x-ray tube and having a ~~copper~~ cooling block partially received within the bearing housing so as to absorb heat transmitted to the bearing assembly and bearing housing ~~as a result of x ray tube operations.~~ A plurality of Eextended surfaces, ~~preferably comprising copper or a copper alloy and attached to the cooling block by way of a post,~~ are disposed in a coolant chamber cooperatively defined by the cooling block and a shell within which the cooling block is partially received. The shell is ~~preferably composed of a high strength steel so as to lends structural rigidity to the combination of the bearing housing and heat sink, and~~ defines a coolant chamber entrance and coolant chamber exit in fluid communication with the coolant chamber. The coolant chamber entrance and exit, ~~in turn,~~ communicate with corresponding coolant inlet and outlet passageways, respectively, cooperatively defined by a pair of insulators which retain the heat sink in a predetermined orientation within an evacuated envelope of an x-ray device. ~~An external cooling unit in fluid communication with the coolant chamber continuously circulates a flow of dielectric coolant through the chamber, by way of fluid conduits connected to the coolant inlet and outlet passageways defined by the insulators, so that the~~ A circulating coolant contacts the extended surfaces and thereby removes heat from ~~the bearing assembly, bearing housing, and related various~~ structures of the x-ray device.